

Notice of Allowability

Application No.

10/611,874

Examiner

Johnny H. Hoang

Applicant(s)

AKAO ET AL.

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed on July 03, 2003.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 03 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Reasons for Allowance

1. Claims 1-8 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art fails to disclose or render obvious the claimed combination including a fresh air quantity reference value setting means for setting a reference value for the fresh air quantity in accordance with an operating state of the engine; failure detecting means for detecting abnormality of said fresh air quantity detecting means, based on a result or comparison between the fresh air quantity detected by; said fresh air quantity detecting means and the reference value set by said fresh air quantity reference value setting means an EGR passage for allowing part of exhaust gas to be recirculated from an exhaust system of the engine to the intake system as EGR gas; an EGR valve inserted in said EGR passage, for controlling a quantity of the EGR gas by varying an opening thereof; target opening setting means for setting a target; opening for said EGR valve in accordance with the operating state of the engine such that an air-fuel ratio or excess air ratio of the exhaust system becomes equal to a predetermined value corresponding to the operating state; and EGR valve control means for controlling said EGR valve in accordance with the target BGR valve opening set by said target opening setting means, wherein said fresh air quantity reference value setting means sets the reference value in accordance with not only the operating state of the engine but also the target EGR valve opening set by said target opening setting means.

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Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The copies of U.S Patent are not provided.

Bale et al (US 6687601), Osaki et al (US 6655200), Osaki et al (US 6508111), Tomikawa et al (US 6453734), and Matsumoto et al (US 5513616).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny H. Hoang whose telephone number is (703) 308-2782. The examiner can normally be reached on Monday - Thursday (7:00Am-5: 30Pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (703) 308-1946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHH
March 29, 2004

Johnny H. Hoang
Examiner
Art Unit 3747

Willis R. Wolfe
Willis R. Wolfe
Primary Examiner
Art Unit 3747